



EXCHANGER SIZE	DIMENSIONS											
	A		B		C		D		N1		N2	
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
WS-42-2E3	35 1/4	895	23 1/4	591	16	406	26	660	2	51	1	25
WS-43-2E3	47 1/4	1200	35 1/4	895	28	711	38	965	2	51	1	25
WS-44-2E3	59 1/4	1505	47 1/4	1200	40	1016	50	1270	2	51	1	25
WS-45-2E3	71 1/4	1810	59 1/4	1505	52	1321	62	1575	2 1/2	64	1 1/4	32
WS-46-2E3	83 1/4	2115	71 1/4	1810	64	1626	74	1880	2 1/2	64	1 1/4	32
WS-47-2E3	95 1/4	2419	83 1/4	2115	76	1930	86	2184	2 1/2	64	1 1/4	32
WS-48-2E3	107 1/4	2724	95 1/4	2419	88	2235	98	2489	2 1/2	64	1 1/4	32
WS-49-2E3	119 1/4	3029	107 1/4	2724	100	2540	110	2794	2 1/2	64	1 1/4	32
WS-410-2E3	131 1/4	3334	119 1/4	3029	112	2845	122	3099	2 1/2	64	1 1/4	32
WS-411-2E3	143 1/4	3639	131 1/4	3334	124	3150	134	3404	2 1/2	64	1 1/4	32
WS-412-2E3	155 1/4	3943	143 1/4	3639	136	3454	146	3708	2 1/2	64	1 1/4	32

NOZZLE SCHEDULE				
SERVICE	MARK	SHELL SIDE	MARK	TUBE SIDE
INLET	(N1)	AS PER TABLE	(N5)	1 1/4 (32) NPT
OUTLET	(N2)	AS PER TABLE	(N6)	1 1/4 (32) NPT
VENT	(N4)	3/4 (19) NPT		

NOTES: 1. SUPPORTS SUPPLIED ONLY IF SPECIFIED ON ORDER.
 2. NOZZLE SIZES SHOWN ARE RECOMMENDED FOR MAX. EXCHANGER LIFE, NO EXTERNAL FORCES APPLY.
 3. FABRICATED TO ASME CODE SECTION VIII DIVISION 1 AND LATEST ADDENDA.
 4. DRAWING IS NOT TO SCALE.
 5. ALL DIMN'S ±1/8 (3) UNLESS OTHERWISE SHOWN.

DESIGN CONDITIONS				
	SHELL		TUBES	
DESIGN PRESSURE	150 PSIG	1034 kPa	150 PSIG	1034 kPa
DESIGN TEMPERATURE	375 °F	191 °C	375 °F	191 °C
MIN. DESIGN METAL TEMP.	35 °F	1.7 °C	35 °F	1.7 °C
HYDRO. TEST PRESSURE	225 PSIG	1551 kPa	225 PSIG	1551 kPa
CONTENTS	STEAM		WATER	

CUSTOMER:
 LOCATION:
 ENGINEER:
 ORDER No.:
 PROJECT/JOB:
 LOCATION:
 TAG: (QUOTE #)

TITLE	A R M S T R O N G				NUMBER	REV.
G.A. 150 LB. WS SERIES HEAT EXCHANGERS	TORONTO - CANADA	MONTREAL - CANADA	BUFFALO - N. Y.	COLCHESTER - U.K.	WS-4-2P-E3	
DATE: 12/01/94 BY: D.C.R.	TEL: (416) 755-2291	TEL: (514) 421-2424	TEL: (716) 693-8813	TEL: (44) 120-657-9491		